

TING XU – LEAD PI
INORGANIC/ORGANIC NANOCOMPOSITE NSET PROGRAM
FY 2014 (Web published 1 Oct 2013 – 1 Oct 2014)

PRIMARY:

1. "Thiophene Fused Azacoronenes: Regioselective Synthesis, Self Organization, Charge Transport, and Its Incorporation in Conjugated Polymers", He, B.; Pun, A. B.; Klivansky, L. M.; McGough, A.; Ye, Y.; Zhu, J.; Guo, J.; Teat, S. J.; [Liu, Y.](#) *Chem. Mater.* vol. 26(13), p. 3920-3927, **2014**. DOI: 10.1021/cm5018272.
2. "Hydroxylation of the Surface of PbS Nanocrystals Passivated with Oleic Acid", Zherebetskyy D., Scheele M., Zhang Y., Bronstein N, Thompson C., Britt D., [Salmeron M.](#), [Alivisatos P.](#), [Wang L.-W.](#), *Science* vol. 344, p. 1380-1384, **2014**. DOI: 10.1126/science.1252727.
3. "In-gap states in electronic structure of nonpolar surfaces of insulating metal oxides", D. Zherebetskyy, [L.W. Wang](#), *Adv. Mat. Interf.* Early View, **2014**. DOI: 10.1002/admi.201300131.
4. "PbS Nanoparticles Capped with Tetrathiafulvalenetetracarboxylate-Utilizing Energy Level Alignment for Efficient Carrier Transport", Scheele, M.; Hanifi, D.; Zherebetskyy, D.; Chourou, S. T.; Axnanda, S.; Rancatore, B. J.; Thorkelsson, K.; [Xu, T.](#); [Liu, Y.](#); [Wang, L.-W.](#); Liu, Y.; [Alivisatos, A. P.](#), *ACS Nano* vol. 8, p. 2532-2540, **2014**. DOI: 10.1021/nn406127s.
5. "Direct 3-D Nanoparticle Assemblies in Thin Films via Topographically Patterned Surfaces", Kao, J., Jeong, S.J., Jiang, Z., Lee, D.H., Aissou, K., Ross, C. A., Russell, T. P. and [Xu, T.](#), *Advanced Materials*, vol. 26, p. 2777, **2014**. DOI: 10.1002/adma.201305561.

SECONDARY

6. "Facet development during platinum nanocube growth", H.-G. Liao, D. Zherebetskyy, H. Xin, C. Czarnik, P. Ercius, H. Elmlund, M. Pan, [L.W. Wang](#), H. Zheng, *Science* vol. 345, p. 916, **2014**. DOI: 10.1126/science.1253149.
7. "Rapid Fabrication of Hierarchically Structured Supramolecular Nanocomposite Thin Films in One Minute", Kao, J., K. Thorkelsson, P. Bai, Z. Zhang, C. Sun, [Xu, T.](#), *Nature Comm.* Vol. 5, p. 4053, **2014**. DOI: 10.1038/ncomms5053.
8. "Enhancing the Performance of Solution-Processed n-Type Organic Field-Effect Transistors by Blending with Molecular ‘Aligner’", Zhang, Y.; Hanifi, D.; Lim, E.; Chourou, S.; Alvarez, S.; Pun, A.; Hexemer, A.; Ma, B.; [Liu, Y.](#) *Adv. Mater.* vol. 26, p. 1223-1228, **2013**. DOI: 10.1002/adma.201304032.
9. "Function Measurement by Gas Phase Photoelectron Spectroscopy and Its Application on PbS Nanoparticles", Axnanda S., Scheele M., Crumlin E., Mao B., Chang R., Rani S., Faiz M., Wang S., [Alivisatos A.P.](#) and Liu Z., *Direct Work Nano Lett.* vol. 13(12), p. 6176-6182, **2014**. DOI: 10.1021/nl403524a.